

Applic. No.: 10/727,753

Amdt. Dated September 12, 2005

Reply to Office action of June 10, 2005

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1 and 3-5 remain in the application. Claims 1 and 3-5 have been amended. Claim 2 has been cancelled.

In item 3 on pages 2-3 of the above-identified Office action, the drawings have been objected to under 37 CFR 1.83(a) as not showing every feature of the invention specified in the claims.

More specifically, the Examiner has stated that the oblique downward inclination must be shown or the feature(s) cancelled from the claim(s). The Examiner has further stated that Fig. 2 appears to show the outlet nozzle to be parallel to the base of the condensation chamber.

It is noted that since the elbow angle 28e is about 70° to 85°, the downward inclination is slight. After viewing Fig. 2, especially in consideration of the elbow angle 28e, a person skilled in the art can clearly understand that the lower end of the elbow is slightly inclined downwardly. It is noted that the drawings are not required to be drawn to scale and have to be read together with the specification. The

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Examiner is, therefore, requested to withdrawn the drawing objection.

In item 6 on pages 3-5 of the above-identified Office action, the specification has been rejected under 35 U.S.C. § 112, first paragraph, as failing to provide an adequate written description of the invention and as failing to adequately teach how to make and/or use the invention, i.e. failing to provide an enabling disclosure.

With regard to items 6a and 6b, it is noted that the descriptions mentioned by the Examiner are not claimed and thus the enablement requirement does not apply. In addition, those descriptions are believed to be common knowledge in the art and a person skilled in the art would understand them without further explanation.

With regard to items 6c, 6d, and 6e, it is noted that the words "substantially" and "significantly" are commonly used in patent practice. They are broad, but not indefinite. Nevertheless, these words have been deleted from the claims to facilitate prosecution.

With regard to item 6f, it is noted that the word "approximately" is commonly used, especially in connection

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with a range, in claim drafting in order to avoid reliance on the doctrine of equivalents in infringement actions. However, this word has been deleted from the claims to facilitate prosecution. Regarding the elbow angle, it is nothing repugnant to define the elbow angel 28e in the way as shown in Fig. 2 so long it is clearly understandable by a person skilled in the art.

In item 7 on page 6 of the above-identified Office action, claims 1-5 have been rejected under 35 U.S.C. § 112, first paragraph, as failing to comply with the enablement requirement.

Please see the discussion above in connection with the rejection to the specification.

In item 8 on pages 6-7 of the above-identified Office action, claims 1-5 have been rejected as being indefinite under 35 U.S.C. § 112, second paragraph.

With regard to item 8a, it is noted that the word "oblique" means neither perpendicular nor parallel. It is not understood why the term "obliquely" is indefinite.

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With regard to items 8b, 8c, 8d, and 8e, the terms "substantial," "approximately," and "significant" have been deleted as discussed above.

It is accordingly believed that the specification and the claims meet the requirements of 35 U.S.C. § 112, first and second paragraphs. Should the Examiner find any further objectionable items, counsel would appreciate a telephone call during which the matter may be resolved. The above-noted changes to the claims are provided solely for cosmetic and/or clarificatory reasons. The changes are neither provided for overcoming the prior art nor do they narrow the scope of the claims for any reason related to the statutory requirements for a patent.

In item 10 on page 8 of the above-mentioned Office action, claims 1 and 3-5 have been rejected as being anticipated by Kataoka et al. (US 5,021,212) under 35 U.S.C. § 102(b).

In item 12 on pages 9-10 of the above-mentioned Office action, claim 2 has been rejected as being unpatentable over Kataoka et al. and further in view of Garabedian (US 4,986,956) under 35 U.S.C. § 103(a).

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The rejections have been noted and claim 1 has been amended in an effort to even more clearly define the invention of the instant application. Support for the changes is found in original claim 2.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

said elbow having an elbow angle causing a lower end of said elbow to be immersed obliquely with respect to a vertical line in the cooling liquid in said condensation chamber; and

said outlet nozzle of said condensation tube being formed by a tube section having a lower side proximal to said base of said condensation chamber and an upper side distal from said base, and said lower side being longer than said upper side.

According to amended claim 1 of the instant application, on the one hand the lower end of the elbow (28c) is immersed obliquely (with respect to the vertical line) in the cooling liquid (20) and on the other hand the lower side of the outlet nozzle (28d), which is proximal to the base of the condensation chamber (14), is longer than the upper side of the outlet nozzle (28d). It is guaranteed through these two measures on the one hand that a relatively gentle direction change of the steam flow can be guaranteed and on the other

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hand that through the specific form of the outlet nozzle, namely a sloping tube end, a relatively wide mixing zone of the outgoing flow medium and the coolant (water) surrounding the outlet nozzle can be provided. It is guaranteed through the above-mentioned structure of the outlet nozzle that the base region is effectively shielded from surge in the coolant, which goes hand in hand with the discharge process.

The above-mentioned structure guarantees a far-reaching pressure relief of the chamber base and the chamber walls from the pressure pulses. The effectiveness of the concept of the invention of the instant application was also able to be confirmed by the inventor on an experimental basis.

This concept, especially the obliquely formed discharge of the elbow region in the cooling liquid and the subsequent opening in the specified outlet nozzle, is in no way derivable from the cited references. It is also not clear what suggestion would lead a person skilled in the art to obtain a hint toward the specific structure of the discharging tube according to the invention of the instant application. In contrast, even considering the large number of references cited as showing the state of the art, no single reference provides a hint of a variant departing from the conventional vertical routing. This shows that according to the unanimous opinion of the

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experts, it is conventional to provide a straight and vertically formed routing without providing any suggestion to change it.

In the few exceptions in the prior art, the routing is so selected that the main routing tube is branched at a right angle to an end tube piece that immerses in the coolant reservoir, without the interposition of an elbow. This kind of structure cannot achieve the gentle direction change together with the avoidance of excessive pressure burden of the relevant components according to the invention of the instant application. In addition, the prior art references also do not contain any hint or suggestion that application of a sloping outlet nozzle in the sense of the invention of the instant application could be useful or helpful.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claim 1. Claim 1 is, therefore, believed to be patentable over the art and since all of the dependent claims are ultimately dependent on claim 1, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1 and 3-5 are solicited.

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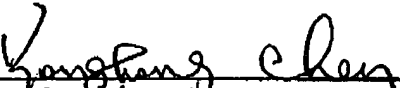
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In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 to the Deposit Account of Lerner and Greenberg, P.A., No. 12-1099.

Respectfully submitted,

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For Applicant

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